

REMARKS

The Examiner rejected Claims 1 and 7 under 35 U.S.C. 112, first paragraph, and objected to Claim 3, because two terms lacked proper antecedent basis and the preamble to Claim 7 referred to "said pointing device". The above amendments cure these defects.

The Examiner rejected Claims 1, 4, 7 and 9 under 35 U.S.C. 103(a) as being unpatentable over Adan, *et al* (hereafter "Adan") (US 6,172,354) in view of Jung, *et al* (hereafter "Jung") (US 2002/013 9918). Applicant traverses this rejection. To sustain a rejection under 35 U.S.C. 103, the Examiner must show that all of the limitations of the claim in question are shown in the combined references or that there is some suggestion in the art to modify the teachings of one of the references to provide the missing claim limitation. In addition, the Examiner must show that the art provides some suggestion that would cause someone of ordinary skill to combine the references and/or make the modification in the teachings. The Examiner has the burden of pointing out where in the art the limitations and suggestions are to be found.

With respect to Claims 1 and 7, the Examiner looks to Adan as disclosing all of the claimed limitations with the exception of the limitation requiring the illumination control signal to depend on at least one of the recorded images taken by the camera system. The Examiner looks to Jung as providing the missing teaching. In particular, the Examiner maintains that Jung teaches an image processor 55 that uses at least one of the images recorded by a camera system 52 to generate an illumination control signal for controlling the intensity of illumination from illumination system 50.

Applicant must respectfully disagree with the Examiner's reading of Jung. The "image sensor" identified by the Examiner does not form an image of the surface in question. Image sensor 52 merely forms some weighted average of light received from the surface. This light is then presented to a photodiode PD shown in Figure 5, which generates an illumination control signal. There is no teaching in Jung that sensor 52 forms any sort of image. Further, it is clear from Figures 2 and 5 that the sensors in question contain only one photodiode, and hence, could not form an image. Accordingly, Applicant submits that the

Examiner has not made a *primia facia* case for obviousness with respect to Claims 1, 7, or the claims dependent therefrom.

The Examiner rejected Claims 2 and 8 under 35 U.S.C. 103(a) as being unpatentable over Adan in view of Jung as applied to Claims 1, 4, 7 and 9 above and further in view of Norskog (US 6,585,158). Applicant traverses this rejection and repeats the arguments made above with respect to the missing teachings in Adan and Jung. Norskog does not provide the missing teachings. Accordingly, Applicant submits that the Examiner has not made a *primia facia* case for obviousness with respect to Claims 2 and 8.

The Examiner rejected Claims 5 and 10 under 35 U.S.C. 103(a) as being unpatentable over Adan and Jung as applied to Claims 1, 4, 7 and 9 above, and further in view of Fujiwara (US 5,608,339). Applicant traverses this rejection and repeats the arguments made above with respect to the missing teachings in Adan and Jung. Fujiwara does not provide the missing teachings. Accordingly, Applicant submits that the Examiner has not made a *primia facia* case for obviousness with respect to Claims 5 and 10.

The Examiner rejected Claim 3 under 35 U.S.C. 103(a) as being unpatentable over Adan and Jung as applied to Claims 1, 4, 7 and 9 above, and further in view of Hedman (US 6,496,180). Applicant traverses this rejection and repeats the arguments made above with respect to the missing teachings in Adan and Jung. Hedman does not provide the missing teachings. Accordingly, Applicant submits that the Examiner has not made a *primia facia* case for obviousness with respect to Claims 5 and 10.

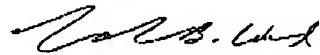
The Examiner rejected Claims 6 and 11 under 35 U.S.C. 103(a) as being unpatentable over Adan and Jung as applied to Claims 1, 4, 7 and 9 above, and further in view of Pranger, *et al* (hereafter "Pranger") (US 5,574,480). Applicant traverses this rejection and repeats the arguments made above with respect to the missing teachings in Adan and Jung. Pranger does not provide the missing teachings. Accordingly, Applicant submits that the Examiner has not made a *primia facia* case for obviousness with respect to Claim 11.

With respect to Claim 6, the Examiner admits that the combination of Adan and Jung does not disclose that the illumination system has a first setting for providing a first level of

accuracy in said determined displacement and a second setting for providing a second level of accuracy that is greater than said first accuracy, said second illumination setting requiring more power than said first illuminating setting, said illumination setting being determined by a control signal supplied by a user of said pointing device. The Examiner looks to Pranger for the missing teaching. According to the Examiner, Pranger teaches a pointing device having a plurality of discrete current settings for the LED. Applicant does not disagree; however, the claims in question require that the pointing device provides different levels of accuracy at the different current settings. The Examiner has not pointed to any such teaching in Pranger. The passages cited by the Examiner refer to changing the current level to compensate for aging in the LED, i.e., returning the LED to its original light output, or to changing the current level to a low value used by the manufacturer in testing the devices. There is no teaching of different levels of accuracy in determining the displacement of the pointing device over the surface. Accordingly, Applicant submits that there are additional grounds for allowing Claim 6.

I hereby certify that this paper is being sent by FAX to 571-273-8300.

Respectfully Submitted,



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Date: Aug. 10, 2006

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